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Engaging Research and Practice in Creating for Outdoor Multi-Sensory Environments: Facing Future Challenges

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Introduction

Sensory garden design is still new in Malaysia

Benefit of collaboration work

‘Syarifah Rokiah Knowledge Centre’

Objectives

To explore the intentions of, and the design process undertaken by practitioners

To find out the main challenges that practitioners had to deal with

Learning through the senses

- **health, emotional and mental**

Users to be more confident,
positive of mind & independent

- **taste**

Engaged with *edible plants*

- **smell**

A variety of *scented plants*

- **sight**

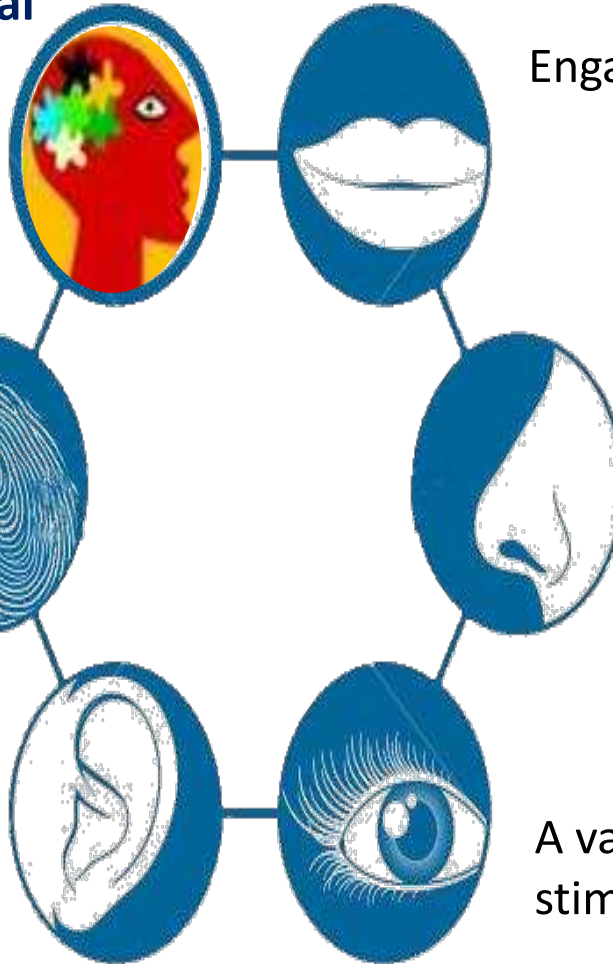
A variety of *colours* for visual stimulation

- **touch**

A variety of *tactile qualities and wildlife*

- **hear**

Water elements, birds, climatic factors



Preliminary Site Studies



Issue 1: Design
Inaccessible water feature

Preliminary Site Studies



**Issue 1: Design
Lack of water feature**

Preliminary Site Studies

A photograph of a garden path. A blue wooden pergola structure runs along the path, supported by vertical posts. The path is covered in gravel and has several flat, rectangular stone stepping stones laid out. To the left, there is a brick building with a bay window and some greenery. To the right, there is a chain-link fence with plants growing through it. In the background, a blue car is parked near a wooden fence.

Issue 1: Design

Inaccessible surface material

Preliminary Site Studies

A photograph of a residential garden. In the background is a two-story house with white walls and brown stone window frames. A blue wooden fence runs across the middle ground. In the foreground, there is a gravel path with wooden edging. A small green bush is in the center. The sky is overcast.

Issue 1: Design
Steps and ramps

Preliminary Site Studies



Issue 2:
Maintenance

Preliminary Site Studies



Issue 3

Lack of design guidelines

Research Stages

Moore and Cosco (2007)
Inclusive Parks



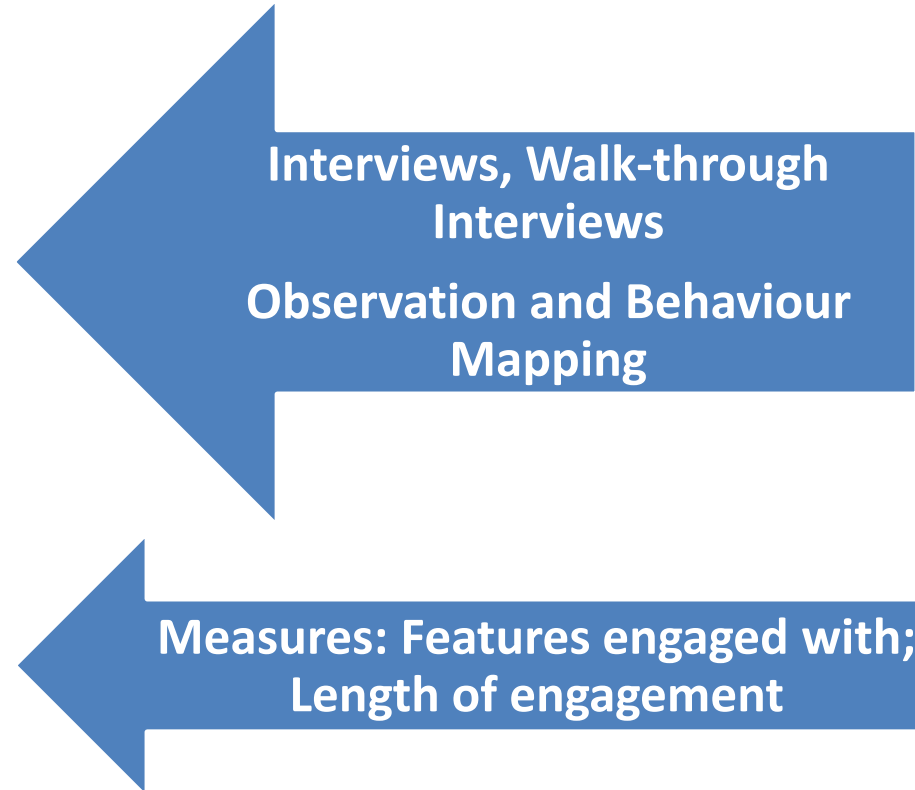
Data Collection
Design, Perception and Use



Data Analysis
Users' Behaviour (observation)
and In-depth Interviews



Research Limitations
Communication difficulties
Duration and period of data collection



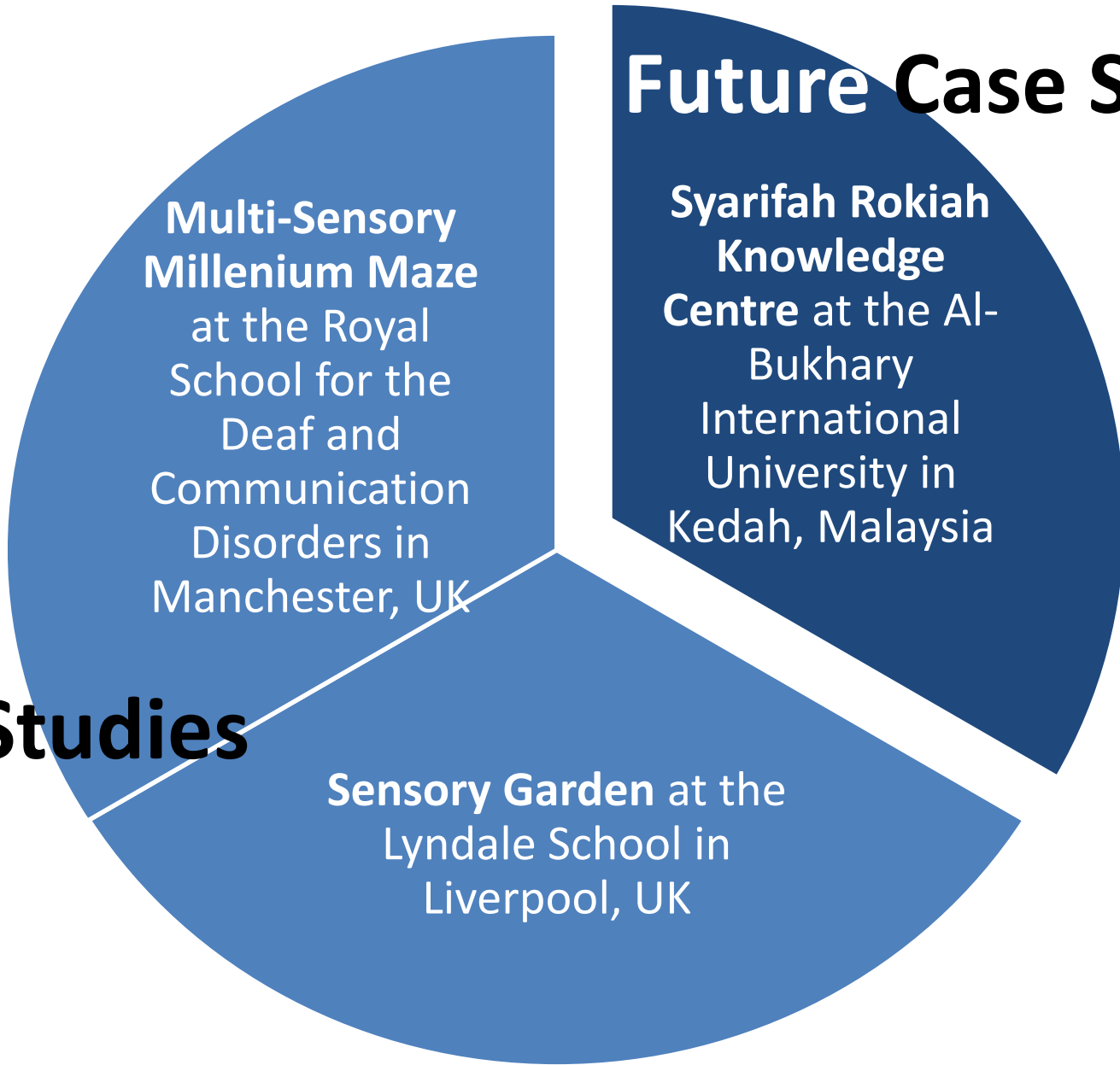
Future Case Study

Syarifah Rokiah
Knowledge
Centre at the Al-
Bukhary
International
University in
Kedah, Malaysia

Multi-Sensory
Millenium Maze
at the Royal
School for the
Deaf and
Communication
Disorders in
Manchester, UK

Sensory Garden at the
Lyndale School in
Liverpool, UK

Case Studies



Findings

Interviews

- Practitioners agreed on the design aspects
- Teachers and Therapists had no strong views on how the aesthetic value relates to the use of the area

Observation

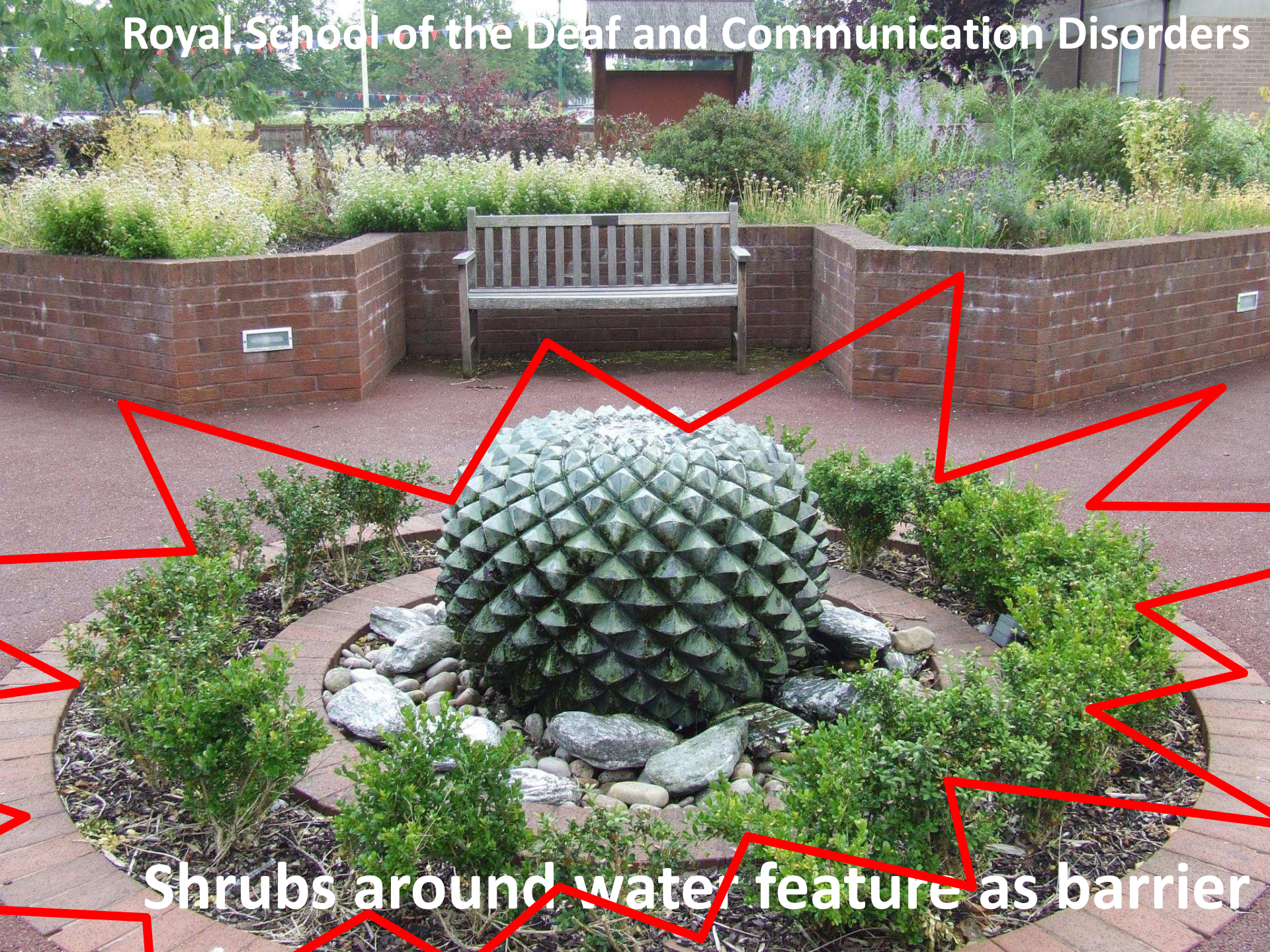
- The pathway layout enables users' behaviour and use of the area
- Users spent a longer time where sensory, were emphasised, rather than aesthetic value

Royal School of the Deaf and Communication Disorders



**Accessibility and
Variety of Pathways**

Royal School of the Deaf and Communication Disorders



Shrubs around water feature as barrier

Royal School of the Deaf and Communication Disorders



Vaporised Trail

Exploraway



Royal School of the Deaf and Communication Disorders



**Musical Pipes in
the *Asteroids*
*Arts Garden***

Royal School of the Deaf and Communication Disorders



Moss on the raised planters

Lyndale School



Path circulation

Path network





Slippery surface near the water feature

Conclusions and Recommendations

Pathway layout has a strong bearing on users' behaviour and use of area

Focus on sensory value, rather than aesthetics

Understanding sensory environments and design recommendations needed

Sharifah Rokiah Knowledge Centre



LEGEND:

1. CHILDREN SCULPTURE IDEA

- Boulders
- Sculpture

2. SCENTED ZONE

- Butterfly Sculpture
- Koi Pond

3. RAINBOW WALK ZONE

- Kinetic Sculpture Water Feature

4. ADVENTURE ZONE

- Tactile Wall
- Bare Foot Walk
- Sand Pit & Earth Bank
- Exercise Equipment

5. MUSIC GARDEN

- Wind Chime
- Piano Board Walk
- Music Zone
- Willow Tunnel

Rainbow Walk

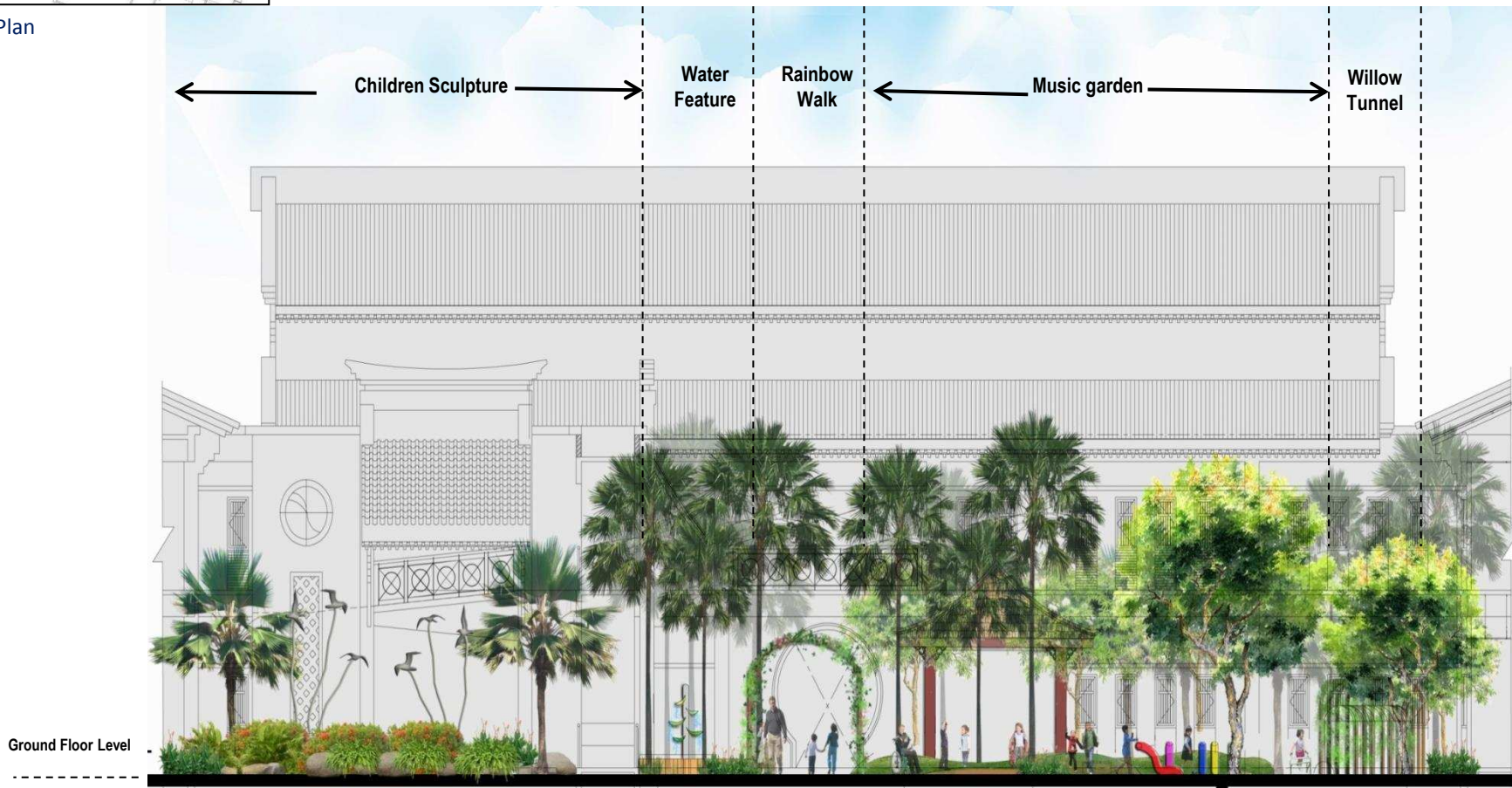


Music Garden





Reference Plan
N.T.S



REAR ELEVATION

Scented Garden

TREES



Gardenia carinata
(Cempaka Kedah)

SHRUBS



Brunfelsia calycina
(Yesterday, Today, Tomorrow)



***Cananga odorata* 'fruticosa'**
(Kenanga)



Cestrum diurnum
(Chinaink Berry)



Cestrum geonum
(Night Cestrum)



Cestrum nocturnum
(Sundai Malam)



Jasminum sambac
(Jasmin)



Rainbow Walk

TREES



Callistemon viminalis
(Bottle Brush)



Tecoma stans
(Yellow Bell)

SHRUBS



Belamcanda chinensis
(Leopard Flower)



Iris pseudacorus
(Yellow Iris)



Ixora coccinea 'Sunkist red'
(Siantan Sunkist Merah)



Pisonia alba
(Mengkudu Putih)



Plumbago capensis
(Plumbago Flower)



Thunbergia erecta
(Blue Bell)



Thank You



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